



PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 648 AND PASADENA RD./CATHERINE AVE. IN ANNE ARUNDEL COUNTY. THE WORK IS NECESSITATED BY THE WIDENING TO CREATE LEFT TURN LANES. MD 648 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL NOW OPERATE IN A NEMA FOUR-PHASE, FULLY-ACTUATED MODE WITH AN ALTERNATE PEDESTRIAN PHASE ACROSS THE NORTH LEG OF MD 648 AND CONCURRENT PEDESTRIAN PHASES ACROSS CATHERINE AVE. AND PASADENA ROAD

APS NOTES

TO CROSS MD 648

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS BALTIMORE ANNAPOLIS BOULEVARD AT CATHERINE."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE

TO CROSS PASADENA ROAD

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS PASADENA AT BALTIMORE ANNAPOLIS BOULEVARD."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE

TO CROSS CATHERINE AVE.

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS CATHERINE AT BALTIMORE ANNAPOLIS BOULEVARD."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

MRS. KIM TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 841-1019

MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 841-1013

MR. JOE HORTY
ASSISTANT DISTRICT ENGINEER - UTILITIES
(410) 841-1039

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MS. DARLENE EIDE
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

CONTACTS FOR POWER COMPANY

INDUSTRIAL/COMMERCIAL SERVICES
NEW BUSINESS CONSTRUCTION
7317 PARKWAY DRIVE SOUTH
HANOVER, MARYLAND 21076

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
10 CY	TEST PIT EXCAVATION
420 LF	12 IN. HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
110 LF	24 IN. HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
1700 LF	5 INCH HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
4900 LF	5 INCH HEAT APPLIED YELLOW THERMOPLASTIC PAVEMENT MARKINGS
24 EA	12 INCH LED SIGNAL HEAD SECTION
2 EA	15 FT. LIGHTING ARM WITH 250 WATT HPSV LUMINAIRE
6 EA	AUDIBLE /TACTILE PEDESTRIAN PUSHBUTTON
5 EA	10 FT. BREAKAWAY PEDESTAL POLE
1 EA	2-WIRE CENTRAL CONTROL UNIT
6 EA	L.E.D. 16 IN. COUNTDOWN PEDESTRIAN
1 EA	16.5 FT. MAST ARM POLE & 38 FT. MAST ARM
1 EA	NON-INVASIVE MICRO-LOOP PROBE WITH 500 FT. LEAD IN
1 EA	NON-INVASIVE MICRO-LOOP PROBE WITH 1000 FT. LEAD IN
LS	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT
1 EA	27 FT. TWIN MAST ARM POLE & 50 FT/70 FT MAST ARMS
1 EA	27 FT. MAST ARM POLE & 38 FT. MAST ARM
2 EA	VIDEO DETECTION CAMERA AND CABLE
730 LF	3 IN. SCHEDULE 80 RIGID PVC CONDUIT- TRENCHED
860 LF	4 IN. SCHEDULE 80 RIGID PVC CONDUIT- TRENCHED
90 LF	3 IN. SCHEDULE 80 RIGID PVC CONDUIT- BORED
270 LF	4 IN. SCHEDULE 80 RIGID PVC CONDUIT- BORED
450 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
1 EA	METERED SERVICE PEDESTAL EMBEDDED
100 LF	ELECTRICAL CABLE 1 - CONDUCTOR NO. 4 AWG - THHN /THWN
12 EA	ELECTRICAL HANDHOLE
5 EA	CUT, CLEAN, GALVANIZE, AND CAP TRAFFIC SIGNAL STRUCTURE
1000 LF	ELECTRICAL CABLE 2 - CONDUCTOR (NO 14 AWG)
1200 LF	ELECTRICAL CABLE 5 - CONDUCTOR (NO 14 AWG)
820 LF	ELECTRICAL CABLE 7 - CONDUCTOR (NO 14 AWG)
500 LF	ELECTRICAL CABLE 2 - CONDUCTOR (NO 12 AWG)
1 EA	CONTROLLER AND CABINET - BASE MOUNT
19 CY	CONCRETE FOUNDATION FOR SIGNAL
1 EA	VIDEO INTERFACE EQUIPMENT
11 EA	3/4 IN. X 10 FT. GROUND ROD
4 EA	D3-2 (VAR X 16") DUAL FACE SIGN - MAST ARM MOUNT
2 EA	SHIELD ASSEMBLY (48" X 75") - POLE MOUNT
2 EA	SHIELD ASSEMBLY (30" X 51") - POLE MOUNT
1 EA	R10-11B SIGN (24" x 24") - MAST ARM MOUNT
1 EA	FOUR-CHANNEL, TIME- DELAY-OUTPUT LOOP DETECTOR AMPLIFIER
6 EA	R10-3(I) SIGN (9" x 15") - POLE MOUNT
1 EA	RELOCATE EXISTING GROUND MOUNTED SIGN
51 LF	4X6 WOOD SIGN SUPPORT

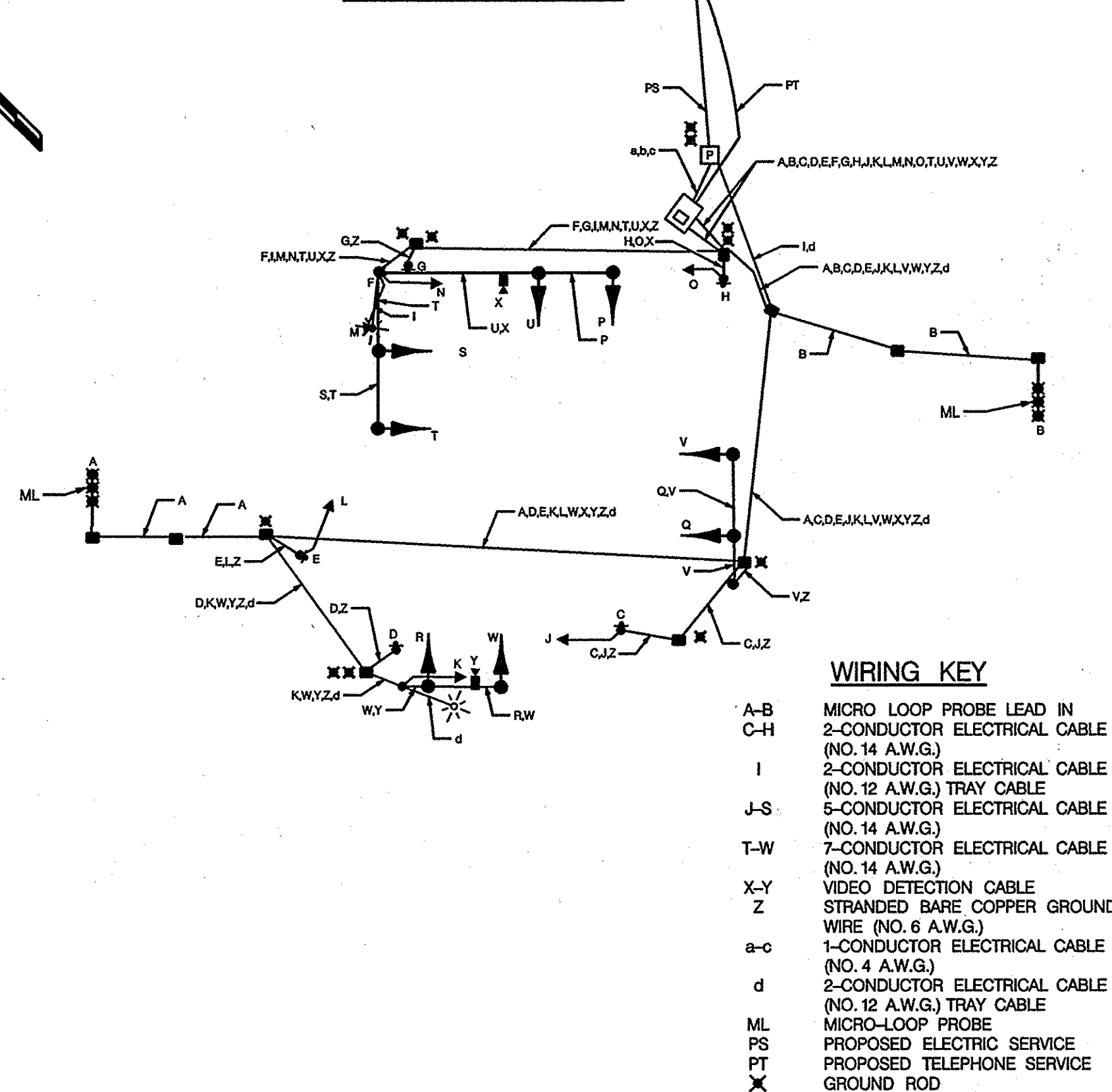
EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 2 & 6	G	G	G	G	R	R	R	R	WK	WK	DW	DW	WK	WK
PED CLEAR	G	G	G	G	R	R	R	R	FL-DW	FL-DW	DW	DW	FL-DW	FL-DW
2 & 6 CHANGE	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 & 8 ALT	R	R	R	R	G	G	G	G	DW	DW	WK	WK	DW	DW
PED CLEAR	R	R	R	R	G	G	G	G	DW	DW	FL-DW	FL-DW	DW	DW
4 & 8 ALT CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	DARK	DARK	DARK	DARK	DARK	DARK



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION PLAN
MD 648 AND PASADENA ROAD/CATHERINE AVE.

TRAFFIC CONCEPTS, INC.

325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101
FAX: (410) 923-6473
EMAIL: TRAFFIC@TRAFFIC-CONCEPTS.COM

SCALE	NONE	DATE	5-27-08	CONTRACT NO.	
DESIGNED BY	T. ZAYDEL	COUNTY	ANNE ARUNDEL		
DRAWN BY	T. ZAYDEL	LOGMILE	0206481.98		
CHECKED BY	K. SCHMID	T.I.M.S. NO.	I-547		
F.A.P. NO.	NA	TOD NO.			
DRAWING NO.	TS-327A GI	SHEET NO.	2	OF	3

FILE PATH: \$FILES
DATE: \$DATES